

REMARKS

Claims 9-15 are pending in this application. By this Amendment, the drawings and specification are amended to correct an informality. No new matter is added. Reconsideration of this application in view of the above amendments and the following remarks is respectfully requested.

The courtesies extended to Applicants' representative by Examiner Price during the telephone interview held March 5, 2009, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below, which constitute Applicants' record of the interview.

During the telephone interview, the Examiner suggested amending Fig. 2 of the application to be labeled as Fig. 2(a) and Fig. 2(b). The specification and Fig. 2 are amended in view of the Examiner's suggestion.

The Office Action rejects claims 9, 10 and 12-15 under 35 U.S.C. §103(a) over JP-A-56-146913 in view of Gitman, U.S. Patent No. 4,622,007. The rejection is respectfully traversed.

As discussed during the interview, the combination of JP-A-56-146913 and Gitman does not disclose, and would not have rendered obvious, a combustor having a means for introducing a straight-line air current into a burner tile, which straightly flows in a vicinity of a burner nozzle from a first end to a second end of the burner tile at which there is an opening of the burner tile by operation of a blower, the straight-line air current flowing straightly through a central portion of the burner tile from the first end to the second end, as recited in independent claim 9.

As discussed during the interview, JP-A-56-146913 discloses that an air current is injected from a second air current portion 10' toward a central axis of a cylinder of a combustion device (see Figs. 2 and 4). The air current from current air portion 10' penetrates

a turning air current from a first air current port 10 to produce a turbulent airflow region (see Fig. 2). JP-A-56-146913 discloses that this disruption chops oils injected from injection nozzle 4 to make oil droplets and promotes the fuel to approach and/or drop on the hot wall of the cylinder, thereby making the fuel droplets become gradually smaller (see Fig. 2).

The Office Action acknowledges that JP-A-56-146913 does not disclose the claimed means for introducing a straight-line air current, but cites Gitman as allegedly overcoming the deficiency. Gitman discloses a heat generating apparatus having an oxygen conduit 7 (allegedly corresponding to the claimed means for introducing a straight-line air current) for introducing oxygen into a conical combustion chamber 9 (see Fig. 1 and col. 3, lines 38-40). However, as discussed during the interview, if JP-A-56-146913 were modified to include the oxygen conduit of Gitman, the resulting combustion apparatus would not have the same features as Applicants' independent claim 9. Specifically, any straight air current flowing down the central portion of the combustion device of JP-A-56-146913 invariably would be interrupted by air current flowing out of second air current portion 10' such that the straight-line air current would not extend from one end of the combustion device to the other end.

Further, as discussed during the interview, JP-56-146913 teaches promoting the contact of fuel droplets to the hot walls of the burner to make the fuel droplets smaller. On the other hand, Gitman specifically teaches that the fuel is prevented from touching the walls of the burner by a thin gas film (see col. 3, lines 51-56). If the combustion device of JP-56-146913 were modified as taught by Gitman, the droplets would not contact the hot walls of the combustion device and as a result would not be adequately reduced in size. Thus, the combination of references alleged by the Office Action would render the combustion device of JP-56-146913 unsatisfactory for its intended purpose (MPEP §2143.01(V)) and change the principle of operation of the burner device (MPEP §2143.01(VI)). Therefore, one skilled in the art would not have made such a modification of JP-56-146913.

Therefore, the combination of JP-A-56-146913 and Gitman does not disclose, and would not have rendered obvious, a combustor having a means for introducing a straight-line air current into a burner tile, which straightly flows in a vicinity of a burner nozzle from a first end to a second end of the burner tile at which there is an opening of the burner tile by operation of a blower, the straight-line air current flowing straightly through a central portion of the burner tile from the first end to the second end, as recited in independent claim 9.

Therefore, independent claim 9 and dependent claims 10 and 12-15 are patentable over the combination of JP-A-56-146913 and Gitman. Thus, it is respectfully requested that the rejection be withdrawn.

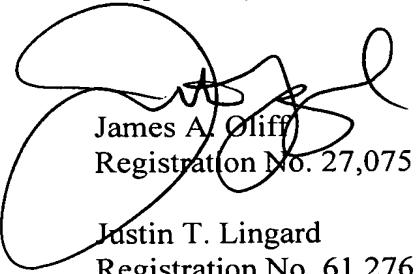
The Office Action rejects claim 11 under 35 U.S.C. §103(a) over JP-A-56-146913 in view of Gitman, and further in view of Nakamura et al. (Nakamura), U.S. Patent No. 4,974,780. The rejection is respectfully traversed.

Because claim 11 incorporates the features of independent claim 9, and because Nakamura fails to overcome the deficiencies of JP-A-56-146913 and Gitman, claim 11 also is patentable over the applied references for at least these reasons, as well as for the additional features that claim 11 recites. Thus, it is respectfully requested that the rejection be withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachments:

Replacement Sheet
Petition for Extension of Time

Date: March 26, 2009

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